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Instructions for use

NEW AND SOME RARE SPECIES OF *ELATERIDÆ* FROM THE JAPANESE EMPIRE

By

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(With Pl. I)

After careful studies about six subfamilies, as Diminae, Crepidomeninae, Senodoninae, Ludiinae, Synaptinae and Denticollinae of the Japanese Elateridae (Saghalien, Kuriles, Corea, Loo-Choo and Formosa included), I found sixty four species and seven varieties under twenty seven genera.

Among these members, thirty five species and seven varieties are enumerated in the present paper, with the descriptions of two new genera, seventeen new species and five new varieties, which were determined to be new for the fauna of Saghalien, Kuriles, Japan proper, Corea, Loo-Choo and Formosa.

A species which was determined as *Agriotes candezei* by LEWIS should be transferred to the genus *Dolopius* and is added here.

Synopsis of Subfamilies and Genera

- 1 Abdomen with five ventral segments (2, 2').
- 1' Abdomen with six ventral segments at least in the male *Denticollinae* (25, 25').
- 2 Front flat or concave; antennal groove narrow, the lateral borders of front beyond the antennal groove oblique... .. (3, 3').
- 2' Front convex and vertical at the anterior part; antennal groove wide, the lateral borders beyond the antennal groove straight... .. (5, 5').
- 3 Basal plates not reaching to the lateral borders of abdomen.. ... *Diminae* (8, 8').
- 3' Basal plates distinctly reaching to the lateral borders of abdomen (4, 4').
- 4 Tarsal joints dilated, more or less heart-shaped *Crepidomeninae* *Metablax*
- 4' 3rd and 4th tarsal joints usually lamellated *Senodoninae* (6, 6').
- 5 Tarsus with pectinated claws *Synaptinae* (23, 23').
- 5' Tarsus with simple claws *Ludiinae* (9, 9').
- 6 Prosternal process extends horizontally for about three fourths and then, after abruptly broken, runs obliquely towards the apex; prosternal sutures distinctly canaliculated *Csikia*
- 6' Prosternal process incurved; prosternal sutures closed, or not canaliculated (7, 7').
- 7 Elytra not broader than the prothorax, at the sides parallel.. *Hemiolimerus*
- 7' Elytra much broader than the prothorax and rounded posteriorly *Penia*
- 8 3rd tarsal joint lamellated *Paradina*
- 8' Tarsal joint usually simple *Yezodina*
- 9 Basal plate more or less sharply denticulated (10, 10').

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- 9' Basal plates not denticulated.. ... (15, 15').
- 10 Mesosternal groove inclined interiorly... (11, 11').
- 10' Mesosternal groove horizontal ... (14, 14').
- 11 Basal plates strongly narrowed outwardly ... (12, 12').
- 11' Basal plates nearly in the same width ... *Aphanobius*
- 12 Prosternal process extends horizontally for about a half way and then, after abruptly broken runs parallel or oblique towards the apex ... (13, 13').
- 12' Prosternal process curved downwardly behind the conxae, then horizontal, being emarginated at the apex ... *Neotrichophorus*
- 13 Lower plane of the prosternal process horizontal, being notched rightangularly at the apex... *Diplostethus*
- 13' Lower plane of the prosternal process incurved, being pointed at the apex ... *Ludius*
- 14 Lateral borders of the mesosternal groove parallel... *Parallelotethus*
- 14' Lateral borders of the mesosternal groove diverged anteriorly ... *Ludigenus*
- 15 Prosternal sutures open anteriorly.. ... (16, 16').
- 15' Prosternal sutures closed.. ... *Agonischius*
- 16 Lateral borders (boundary lines between the pronotum and propleuron) curved downwardly at the anterior part, reaching to the undersides of the eyes ... (17, 17').
- 16' Lateral borders straight, not reaching to the undersides of the eyes ... (19, 19').
- 17 Basal plates suddenly and strongly narrowed outwardly... *Sceliscus*
- 17' Basal plates gradually and gently narrowed outwardly ... (18, 18').
- 18 Prosternal sutures incurved ... *Agriotes*
- 18' Prosternal suture straight ... *Agriotides*
- 19 Mesosternal groove inclined interiorly .. (20, 20').
- 19' Mesosternal groove horizontal ... (22, 22').
- 20 Front more or less rounded ... (21, 21').
- 20' Front truncated ... *Pittonotus*
- 21 Basal plates nearly in the same width at the outer half, being somewhat broader inwardly; antennae very short and feebly serrated... *Sericus*
- 21' Basal plates strongly narrowed outwardly; antennae of the male beyond the hind angles of prothorax. ... *Dolopius*
- 22 Lateral borders of the mesosternal groove diverged anteriorly ... *Ochosternus*
- 22' Lateral borders of the mesosternal groove parallel... *Thoramus*
- 23 Tarsal joints usually simple... *Adrastus*
- 23' 4th tarsal joints lamellated, broader than the 3rd ... (24, 24').
- 24 Front acuminate anteriorly... *Glyphonyx*
- 24' Front transverse anteriorly ... *Silesis*
- 25 Frontal border with a carinated ridge ... *Denticollis*
- 25' Frontal border without a carinated ridge... (26, 26').
- 26 Antennae pectinated in the male; eyes circular ... *Plectrostermus*
- 26' Antennae serrated in both sexes; eyes oval ... *Hemiops*

1. *Metablax acutipennis* WHITE

Elatr acutipennis WHITE, Voy. Erebus and Terror, Ins., p. 7, t. 1, f. 9 (1846).

Blax acutipennis CANDÈZE, Monogr., IV, p. 201, pl. II, f. 9 (1863).

Metablax acuminatus SCHWARZ, in Wytzman Gen. Ins., 46, Elat. 238 (1907).

Hab.—Formosa; Kôtocho (T. SHIRAKI).

Distr.—Newzealand, Formosa.

Nom. Jap.: *Chairo-hiraashi-kometsuki*

2. *Hemiolimerus emodi* CANDÈZE

Hemiolimerus emodi CANDÈZE, Monogr. IV, p. 227, t. 3, f. 5 (1963).

Hab.—Formosa; Rônô (T. SHIRAKI).

Distr.—Himalaya, Formosa.

Nom. Jap.: *Naga-kakumune-kometsuki*

3. *Penia eschscholtzi* HOPE

Elater eschscholtzi HOPE in Gray, Zool. Miscell., p. 26 (1831).

Penia eschscholtzi CANDÈZE, Monogr. IV, p. 230 t. 3, f. 7 (1863).

Hab.—Formosa; Kôshun (T. SHIRAKI).

Distr.—Nepal, Formosa.

Nom. Jap.: *Mukuge-semaru-kometsuki*

4. *Paradima* (n. g.) *tattakensis* s. sp. (Pl. I, fig. 1)

♀. Elongate, parallel, with long griseous pubescence. Head dark reddish, with a triangular impression between the eyes, coarsely and very densely punctured. Prothorax fuscous, rather opaque, dark reddish at the anterior and lateral margins, being spherically convex, rather longer than wide; punctation very densely set on the whole surface; the hind angles very short and rather obtuse, with each a notch near the hind angles; scutellum convex, nearly triangular. Elytra somewhat darker than the prothorax, with a metallic shining, being striated with strong punctation; the interstices rather convex, feebly punctured. Antennae fuscous, basal two joints dark reddish, the 2nd joint the smallest and globose, the 3rd twice longer than the 2nd, nearly as long as the 4th but much slenderer. Legs dark reddish.

Length: $14\frac{1}{2}$ mm. Width: $3\frac{1}{2}$ mm.

Hab.—Formosa; Tattaka 1 ♀ 20-V, 1924 (R. TAKAHASHI).

Distr.—Formosa.

Nom. Jap.: *Tattaka-marumune-kometsuki*

***Paradima* n. g.**

♀. Head inclined downwardly, concave and broader than long. Labrum short and transverse. Apical joint of the maxillary palpus long and axe-shaped. Mandible rather robust and bifurcated. Antennae relatively short, serrated from the 3rd joint, the 2nd the smallest, covered with long pubescence. Prothorax convex, rather longer than wide; scutellum nearly heart-shaped. Elytra elliptical and convex. Prosternum broad, slightly rounded at the anterior part; prosternal process gently incurved behind the coxal cavity; prosternal sutures

straight and closed entirely, but somewhat depressed at the anterior part. Mesosternal groove inclined downwardly. Basal plates gradually and strongly narrowed outwardly. Legs slender, the 1st tarsal joint simple and the longest, the 2nd and 3rd lamellated, the 4th the smallest and deeply inserted in the 3rd, the claws being simple.

Genotype—*Paradima tattakensis* MIWA

5. *Yezodima* (n. g.) *convexum* n. sp. (Pl. I, fig. 2).

♂, ♀. Convex, shining especially on the pronotum, with short fulvous pubescence. Head black, being flat and nearly quadrilateral, slightly foveolated at each frontal corner and slightly impressed longitudinally in the middle, coarsely and rather unevenly punctured. Prothorax convex, broader than long and rounded at the sides; rather fuscous except on the lateral sides of pronotum and propleuron which are pale yellow; very finely and sparsely punctured on the whole surface; the hind angles distinctly carinated and not turned outwardly; scutellum convex, nearly pentagonal. Elytra elliptical, fuscous brown, margined with pale yellowish at the lateral sides and apical part, with conspicuous striations which are not punctured; the interstices flat, 2-5 broader than others, being minutely and sparsely punctured at the humeral part, being covered with granules on the posterior part. Antennae pale yellow, relatively short, the 2nd joint slightly shorter and narrower than the 3rd which is nearly as long as the 4th. Legs concolorous with the antennae, the tibiae compressed.

Length: 9-14 mm. Width: $3\frac{1}{2}$ - $5\frac{1}{2}$ mm.

Hab.—Hokkaido; Zenibako 3 ♂, 4 ♀ 4-VI, 1916 (S. MAMSUMURA).

This species has been collected also abundantly in Kuriles by K. DOI at the following places:

Etorup island; Shana 10 ♂, 15 ♀ 13-VII, 1927. Shimushu island; Jōgasaki 1 ♂ 11-VIII, 1926, Bettobu 1 ♀ 13-VIII, 1926, Murakamizaki 1 ♂ 13-VIII, 1926. Uruppu island; Kofuneminato 1 ♂, 3 ♀ 26-VIII, 1927, Tokotan 2 ♂, 1 ♀ 3-IX, 1927.

Distr.—Japan proper, Kuriles.

Nom. Jap.: *Kiberi-maru-kometsuki*

6. *Yezodima* (n. g.) *aeneonigra* n. sp. (Pl. I, fig. 3)

♂. Black, with a brassy shining, fine, short, fulvous pubescent. Head flat, broader than long, strongly and densely punctured. Prothorax convex, at the lateral sides amplified in the middle; punctation like that of the head; the hind angles carinated, relatively longer, acuminate behind and turned

outwardly; scutellum flat. Elytra finely striated, without any punctation, the interstices flat, strongly and coarsely punctured. Antennae fuscous, the 3rd joint longer and slenderer than the 4th which is nearly as long as the 2nd but much broader. Legs reddish brown, the femora darker.

Length: $9\frac{1}{2}$ mm. Width: 3 mm.

Hab.—Hokkaido; Sapporo 1 ♂ 8-VII, 1907 (S. MATSUMURA).

Distr.—Japan proper.

Nom. Jap.: *Aoguro-maru-kometsuki*

***Yezodima* n. g.**

♂, ♀. Head inclined, rather flat, nearly quadrilateral. Labrum short and transverse. Apical joint of the maxillary palpus axe-shaped. Mandible robust, bifurcated near the apex and acuminate. Antenna short, filiform, not serrated, the apical joint simple, neither truncated nor emarginated. Prothorax convex, broader than length; scutellum nearly pentagonal. Elytra elliptical and convex, the elytral striations without punctation. Prosternum broad, excurved at the anterior border; the prosternal process gradually incurved; the prosternal sutures straight, closed entirely except at a narrow anterior part. Borders of the mesosternal groove inclined and diverged anteriorly. Basal plates suddenly and strongly narrowed from the middle part and then disappearing. Legs relatively short, tibiae compressed, somewhat enlarged at the apices which are terminated with each a bifurcated tooth, the tarsi simple and depressed, the claws being simple.

Genotype—*Yezodima convexum* MIWA.

7. *Ludius sieboldi* CANDÈZE

Ludius sieboldi CANDÈZE, Mém. Soc. Liège, (2) V, p. 27 (1873); LEWIS, Ann. Mag. Nat. Hist., (6) XIII, p. 265 (1894); MATSUMURA, Thousand Ins. Japan, Vol. I, No. 3, p. 110, pl. 49, f. 18 ♀ (1905).

Hab.—Hokkaido; Sapporo (S. MATSUMURA and the author), Mt. Daisetsu (S. MATSUMURA, T. UCHIDA and H. KÔNO). Honshiu; Shiria in Aomori Prefecture (H. KÔNO), Yoshino (the author), Shikoku; Awa (E. GALLOIS). Kiushiu; Haki (S. MATSUMURA), Kumamoto (H. KAWAMURA). Formosa; Baibara 2 ♂, 4 ♀ VII-VIII, 1925-'26 (K. KIKUCHI and the author), Musha 25-VII, 1929 (T. UCHIDA).

Distr.—Japan proper, Formosa.

Nom. Jap.: *Ohonaga-kometsuki*

This species is new for Formosa.

8. *Pittonotus sachalinensis* n. sp. (Pl. I, fig. 4)

♂. Black, somewhat bronzy shining, with fine, short, fulvous pubescence.

Head flat, the front vertical, densely and evenly punctured on the whole surface. Prothorax convex, the narrowest at the anterior border, gradually widening to the base; punctation like that of the head on the disk, much denser and finer on the lateral sides; propleuron with a yellowish tinge at the anterior part; the hind angles rather acuminate behind and turned outwardly, with each a conspicuous carina; scutellum fuscous, nearly circular. Elytra pale brownish yellow, with fine punctured striae, the interstices densely and coarsely punctured. Antennae pitchy brown, the basal joint reddish. Legs slender, concolorous with the elytra.

Length: $10\frac{1}{2}$ mm. Width: 3 mm.

Hab.—Saghalien; Tonnai 1 ♂ 10–VII, 1927 (the author).

Distr.—Saghalien.

Nom. Jap.: *Kibane-ikubi-kometsuki*

9. *Pittonotus flavipennis* n. sp. (Pl. I, fig. 5)

♂. Black, a little shining, fine, short, griseous pubescent. Head flat, densely punctured, the front nearly vertical. Prothorax convex, the narrowest and rounded at the anterior part, gently widening to the middle, then suddenly widened posteriorly; punctation like that of the head on the lateral sides, rather finer and somewhat sparser on the disk; the hind angles relatively large and acute, with each an acute carina; scutellum nearly elliptical. Elytra pale reddish yellow, with fine punctured striae, the interstices not elevated, densely and unevenly punctured. Antennae black, distinctly serrated. Legs slender, concolorous with the elytra.

Length: 9 mm. Width: $2\frac{1}{2}$ mm.

Hab.—Saghalien; Konuma 1 ♂ 8–VII, 1927 (the author).

Distr.—Saghalien.

Nom. Jap.: *Hime-kibane-ikubi-kometsuki*

10. *Pittonotus montanus* n. sp. (Pl. I, fig. 6)

♀. Pale reddish yellow except the head, pronotum, pro-, meso-, metasternum and basal plates of the hind coxae which are fuscous black, covered with fine, short, fulvous pubescence. Head inclined, the front vertical, with two circular foveae between the eyes and one more elongated fovea in the middle; very closely punctured on the whole surface. Prothorax convex, narrowing anteriorly, gently and gradually widening posteriorly, with some reddish yellow tinge at the anterior as well as posterior parts; very densely punctated on the lateral sides, rather finer and somewhat sparser on the disc; the hind angles acute, with each a carina; scutellum nearly oblong. Elytra finely punctured

striated, the interstices feebly and rugosely punctured. Antennae pitchy brown, basal joint reddish. Legs slender.

Length: $8\frac{1}{2}$ mm. Width: $2\frac{1}{2}$ mm.

Hab.—Honshiu; Mt. Tsubakura in Shinano District 1 ♀ 27–VII, 1924 (H. Kôno).

Distr.—Japan proper.

Nom. Jap.: *Miyama-ikubi-kometsuki*

11. *Pittonotus aenescens* n. sp. (Pl. I, fig. 7)

♂, ♀. Black, with a bronzy shining, with short, fine, griseous pubescence. Head inclined downwardly, with an impression in the middle, closely punctured, the front being vertical. Prothorax convex, the narrowest at the anterior rim, gradually widening to the base; punctation on the disc like that of the head, rather stronger and much denser on the lateral sides; a feeble longitudinal channel in the middle, which is rather obsolescent anteriorly. Elytra finely striated with punctation, the interstices slightly elevated, densely and coarsely punctured. Antennae piceous, the 2nd joint small and nearly as long as the 3rd. Legs slender, reddish yellow, the femora fuscous.

Length: ♂ $8\frac{1}{2}$ mm, ♀ 10 mm. Width: ♂ $2\frac{1}{2}$ mm, ♂ $2\frac{3}{4}$ mm.

Hab.—Honshiu; Chiuzenji 1 ♀ 27–VII, 1917 (E. Gallois). Saghalien; Kozuma 1 ♂ 8–VII, 1927 (the author).

Distr.—Japan proper, Saghalien.

Nom. Jap.—*Kuro-ikubi-kometsuki*

12. *Neotrichophorus junior* CANDÈZE

Ludius junior CANDÈZE, Mém. Soc. Liège, (3) V, p. 27 (1873).

Trichophorus junior SCHWARZ in Wytsman, Gen. Ins., 46, Elat. p. 259 (1907).

Hab.—Honshiu; Tôkio (E. GALLOIS), Chichibu (E. GALLOIS), Narita (E. GALLOIS). Hokkaido; Sapporo (S. MATSUMURA). Formosa; Shinsha 1 ♂ 23–VII, 1906 (S. MATSUMURA), Baibara 2 ♂, 4 ♀ 9–VIII, 1926 (E. KINOSHITA).

Distr.—Japan proper, Formosa.

Nom. Jap.: *Hige-naga-kometsuki*

This is first record for Formosa.

13. *Neotrichophorus plebejus* CANDÈZE

Ludius plebejus CANDÈZE, Mém. Soc. Liège, (3) V, p. 28 (1873); FLEUTIAUX, Bull. Soc. Ent. Fr., p. 200 (1906).

Trichophorus plebejus SCHWARZ in Wytsman, Gen. Ins., 46, Elat. p. 259 (1907).

Hab.—Honshiu; Tôkio (E. GALLOIS), Nishikibe in Shinano District (Y. ÔTA). Shikoku; Kôyadaira in Awa District (E. GALLOIS). Corea; Seul 1 ♀ 28–VIII, 1922 (E. GALLOIS). Loo-Choo; Okinawa-hontô 2 ♂, 3 ♀ (S. SAKAGU-

CHI). Formosa; Taihoku 1 ♂ 12-VI, 1925 (T. YOSHIDA), 1 ♂, 1 ♀ 3-VII, 1926 (the author).

Distr.—Japan proper, Corea, Loo-Choo, Formosa.

Nom. Jap.: *Ko-naga-kometsuki*

This species is new for Corea, Loo-Choo and Formosa.

14. *Aphanobius alaomorphus* CANDÈZE

Aphanobius alaomorphus CANDÈZE, Monogr., IV, p. 319, t. 4, f. 11 (1863).

Hab.—Formosa; Rônô VIII, (T. SHIRAKI).

Distr.—Malacca, Darjiling, Cambodja, South China, Formosa.

Nom. Jap.: *Eguri-hoso-naga-kometsuki*

15. *Aphanobius longithorax* WIEDEMAN

Elater longithorax WIEDEMAN, Zool. Mag., II, p. 1, 106 (1823).

Aphanobius longus CANDÈZE, Monogr., IV, p. 322 (1863).

Hab.—Formosa; Kôtôsho V, (T. SHIRAKI).

Distr.—Bengal, Borneo, Java, Philippines, Formosa.

Nom. Jap.: *Kibane-hoso-naga-kometsuki*

16. *Parallellostethus acutus* CANDÈZE

Ludius acutus CANDÈZE, Monogr., IV, p. 299, t. 4, f. 8 (1863).

Parallellostethus acutus SCHWARZ in Wytsman, Gen. Ins., 46, Elat. p. 258 (1907).

Hab.—Formosa; Kôshun VIII, (T. SHIRAKI), Kôtôsho V, (T. SHIRAKI).

Distr.—Java, Assam, Sikkim, Darjiling, Formosa.

Nom. Jap.: *Kuro-funagata-kometsuki*

17. *Ludigenus politus* CANDÈZE

Ludigenus politus CANDÈZE, Monogr., IV, p. 326 (1863).

Hab.—Formosa; Kôshun VIII, (T. SHIRAKI).

Distr.—Sunda Island, Philippines, Andaman, Tonkin, Annam, Laos, Cambodja, Formosa.

Nom. Jap.: *Naga-munabiro-kometsuki*

18. *Scelisus sanguineus* CANDÈZE

Scelisus sanguineus CANDÈZE, Monogr., IV, p. 328, t. 5, f. 1 (1863).

Hab.—Formosa; Rônô VII (T. SHIRAKI).

Distr.—Nepal, Assam, Formosa.

Nom. Jap.: *Yotsuten-oho-beni-kometsuki*

19. *Agriotes persimilis* LEWIS

Agriotes persimilis LEWIS, Ann. Mag. Nat. Hist., (6) XIII, p. 312 (1894).

Hab.—Widely distributed in South-Saghalien and about thirty specimens have been collected by Messrs. S. MATSUMURA, T. UCHIDA, S. TAKANO, S. MINOWA and the author at the following places:

Ichinosawa 20-VI, 1920, Bannosawa 14-VII, 1924, Kaizuka 11-VII, 1924, Konuma 8-VII, 1927, Tonnai 10-VII, 1927, Kiminai 11-VII, 1927.

This species also distributed in Kuriles and twenty two specimens have been collected by Mr. K. DOI. The localities and dates are as follows:

Shikotan Island; Notoro 14-VII, 12-VIII, 1925, Shakotan 7-VII, VIII, 1925. Kunashiri island; Tomari 1-VII, 1925, Tôfutsu 6-VIII, 1025. Etrup island; Kamoikotan 15-20-VII, 1927, Bettobu 11-VII, 1927, Naibo 23-VII, 1927. Hokkaido; Sapporo (S. ISHIDA), Kushiro (S. MATSUMURA), Rishiri island (K. DOI). Honshiu; Mt. Tsubakura in Shinano District 27-VII, 1924 (H. KÔNO).

Distr.—Japan proper, Saghalien, Kuriles.

Nom. Jap.: *Oho-kabairo-kometsuki*

This species has been reported by G. LEWIS from Hokkaido in 1894, but it is new for Saghalien, Kuriles and Honshiu.

20. *Agriotes puberulus* n. sp. (Pl. I, fig. 8.)

♂, ♀. Black, a little shining, thickly clothed with short fulvous piles. Head convex, closely punctured. Prothorax parallel, longer than wide; punctation like that of the head on the disc, but somewhat denser and finer on the lateral sides; the hind angles relatively short, slightly turned outwardly, with each a carina; scutellum oblong and acuminate behind. Elytra finely and strongly striated punctured, the interstices not elevated, densely but rather feebly punctured. Antennae reddish yellow, the 2nd joint oblong, which is nearly as well as the 3rd, the 4th-10th triangular. Legs slender, bright reddish yellow.

Length: ♂ 13 mm, ♀ 15½ mm. Width: ♂ 3 mm, ♀ 3½ mm.

Hab.—Hokkaidô; Sapporo 1 ♂ 25-VI, 1927 (the author), Honshiu; Iwate 1 ♀ 10-VI, 1911 (T. OGASAWARA).

Distr.—Japan proper.

Nom. Jap.: *Ke-munaboso-kometsuki*

11. *Agriotes fuscicollis* n. sp. (Pl. I, fig. 9)

♂. Fuscous brown, shining, with short cinereous pubescence. Head convex, densely and rather coarsely punctured; eyes bright yellow, very conspicuous. Prothorax dark reddish, convex, rounded anteriorly, at the sides in the middle rather parallel, widening before the hind angles; punctation very fine and even, but somewhat denser on the lateral sides than on the disc; the

hind angles obtuse behind and turned outwardly; scutellum elongated and pointed posteriorly. Elytra with fine punctured striae, the interstices convex, densely and coarsely punctured. Antennae reddish yellow. Legs reddish.

Length: $8\frac{3}{4}$ mm. Width: $2\frac{1}{2}$ mm.

Hab.—Honshiu; Kyôto 1 ♂ 22–VII, 1925 (the author).

Distr.—Japan proper.

Nom. Jap.: *Tobiuro-munaboso-kometsuki*

22. *Agriotes sonanis* n. sp. (Pl. I, fig. 10)

♂. Black, somewhat opaque, clothed with fine, golden, grey hairs. Head very closely and rather coarsely punctured and rugose; the frontal carina oblique at the lateral sides and well elevated. Prothorax brownish yellow on the pronotum except the basal part and a longitudinal median line which are black; rounded anteriorly, at the lateral sides in the middle parallel, widening a little before the hind angles; very densely and evenly punctured on the whole surface; the hind angles elongated, rather acute, with each a long carina; scutellum concave, nearly triangular. Elytra testaceous, narrowly fuscous at the apices of sutural parts; striae fine and strongly punctured, the interstices flat, 2–5 rather wide, all finely and evenly punctured. Antenna pitchy brown, the 2nd joint short and nearly as long as the 3rd, feebly serrated from the 4th joint. Legs concolorous with the antenna.

Length: 13 mm. Width: 3 mm.

Hab.—Formosa; Musha 1 ♂ 10–VI, 1919 (J. SONAN).

Distr.—Formosa.

Nom. Jap.: *Sonan-munaboso-kometsuki*

23. *Agriotes nokozanus* n. sp. (Pl. I, fig. 11)

♂. Elongate, black, with cinereous pubescence. Head coarsely and very closely punctured. Prothorax bright reddish except at the prosternum, being closely punctured on the whole surface; punctures minutely and very even; much longer than width, at the lateral sides parallel, widening before the hind angles; a feeble longitudinal channel in the middle, which is rather obliterated anteriorly; the hind angles elongated and acuminate behind, with each a carina; scutellum pointed posteriorly. Elytra punctate-striated, the interstices finely punctured and rugose. Antennae pitchy brown, the 2nd and 3rd joints reddish, nearly globose, loosely serrated from the 4th joint. Legs slender, concolorous with the antennae, the tarsi somewhat paler.

Length: 10 mm. Width: $2\frac{1}{3}$ mm.

Hab.—Formosa; Mt. Nôkô 1 ♂ V, 1922, (M. KATÔ)

Distr.—Formosa.

Nom. Jap.: *Nôkô-munaboso-kometsuki*.

24. *Agriotes angustatus* n. sp. (Pl. I, fig. 12)

♂. Elongate, black rather opaque, covered with golden-grey hairs. Head closely and rather coarsely punctured, the frontal carina oblique at the lateral border and distinctly elevated. Prothorax longer than wide, rounded anteriorly, slightly widening before the hind angles, at the lateral sides parallel in the middle; punctated like that of the head; the hind angles turned outwardly and well carinated; scutellum concave, acuminate behind. Elytra striated punctured, the striae fine and the punctation very strong, the interstices minutely and rugosely punctured. Antennae and legs reddish brown, but the legs somewhat paler.

Length: 10 mm. Width: $2\frac{1}{2}$ mm.

Hab.—Formosa; Kuyania 1 ♂ 25–VI, 1907 (S. MATSUMURA).

Distr.—Formosa.

Nom. Jap.: *Hoso-kuro-munaboso-kometsuki*

25. *Agriotes pallidiangulus* n. sp. (Pl. I, fig. 13)

♂, ♀. Fuscous, a little shining, with fine, griceous piles. Head slightly impressed in the middle, minutely and evenly punctured. Prothorax spherically convex; punctation like that of the head; the hind angles pale brownish yellow, slightly turning outwardly; scutellum wedge-shaped and pointed posteriorly. Elytra with fine and strong punctured striae, the interstices flat, minutely and rugosely punctured. Antennae pitchy brown, the 2nd and 3rd joints paler, being globose. Legs slender, brownish yellow. Elytra and the ventral segments of abdomen sometimes brownish yellow.

Length: $5\frac{1}{3}$ –6 mm. Width $1\frac{1}{2}$ –2 mm.

Hab.—Formosa; Horisha 1 ♀ 39–IV, 1907 (S. MATSUMURA), Shinchiku 1 ♂ 15–VII, 1918 (J. SONAN), Horisha 1 ♂ 24–V, 1925 (S. TAKANO), Taihoku 1 ♀ 19–V, 1925 (R. TAKAHASHI), Mt. Niitaka 1 ♀ 10–VII, 1925 (the author).

Distr.—Formosa.

Nom. Jap.: *Kadousu-munaboso-kometsuki*

26. *Agriotides formosanus* n. sp. (Pl. I, fig. 14)

♀. Black, rather opaque, clothed with long, yellowish grey piles. Head slightly impressed longitudinally in the middle, coarsely and very closely punctured. Prothorax spherically convex; punctation similar with the head; the hind angles acute, slightly turning outwardly, with each a distinct carina. Elytra dusky reddish brown, with fine punctured striae, the interstices flat, minutely

punctured and rugose. Antennae reddish brown and lax, the 2nd and 3rd joints small. Legs dark reddish, the tarsal joints depressed.

Length: 9 mm. Width: $2\frac{3}{4}$ mm.

Hab.—Formosa; Horisha 1 ♀ 21–VII, 1926 (the author).

Distr.—Formosa

Nom. Jap.: *Taiwan-sedaka-kometsuki*

27. *Agonischius vittiger* HEYDEN

Agonischius vittiger HEYDEN, Horae Soc. Ent. Ross., XXI, p. 267 (1887); JACOBSON, Käf. Russl., 1905–16, t. 39, f. 25 (1913).

Hab.—Corea; Keijō 1 ♂ VII, 1920 (H. OKAMOTO). Loo-Choo; Ishigakijima 3 ♂, 3 ♀ 10–V, 1911 (S. MATSUMURA).

Four specimens which have been collected in Loo-Choo, with each a long black spot on the sutural part of elytra, which occupies the 1st and 2nd or sometimes on the 3rd and 4th interstices.

Distr.—Corea, Loo-Choo.

Nom. Jap.: *Kuroheri-tsuya-kometsuki*

28. *Agonischius mushanus* n. sp. (Pl. I, fig. 15)

♂. Bright metallic green, with a golden shining, hardly pubescent. Head feebly impressed longitudinally in the middle, coarsely and unevenly but very closely punctured. Prothorax convex, narrowing anteriorly, gradually and gently widening posteriorly, with a longitudinal channel in the middle; punctation like that of the head on the lateral sides, rather finer and a little sparser on the disc; the hind angles acute, with each a carina; scutellum convex, pointed posteriorly, with a longitudinal carinated ridge in the middle. Elytra with strong punctured striae, the interstices coarsely and very faintly punctured. Antennae fuscous, the basal three joints brownish yellow, the 2nd joint short and nearly as long as the 3rd, serrated from the 4th. Legs slender, bright reddish yellow.

Length: $5\frac{1}{2}$ mm. Width: $1\frac{1}{2}$ mm.

Hab.—Formosa; Musha 1 ♂ 10–VI, 1919 (T. OKUNI and J. SONAN).

Distr.—Formosa.

Nom. Jap.: *Musha-tsuya-kometsuki*

29. *Agonischius obscuripes* GYLLENHAL

Agonischius obscuripes GYLLENHAL in Schönh., Syn. Ins., III, Append. p. 131 (1817).

Widely distributed in Formosa and Loo-Choo, and about thirty four specimens of this species have been collected. Among these specimens I found seven sorts of varieties as follows:

var. 1. *caschimirensis* KOLLAR et REDTENBACHER*Ludius caschimirensis* KOLLAR et REDT. in Hügel, Kaschm. p. 507 (1848).

Hab.—Formosa; Baibara 1 ♀ 29-V, 1925 (R. SAITO).

Distr.—East India, Formosa.

var. 2. *ruficephalus* n. var.

Body reddish except the elytra which is fuscous with an aeueous luster.

Length: 11-15 mm. Width: 3-4 mm.

Hab.—Loo-Choo; Ishigakijima 1 ♂ V-1923 (S. HIRAYAMA). Formosa; Kôshun 1 ♀ 30-IV, 1918 (J. SONAN).

Distr.—Loo-Choo, Formosa.

var. 3. *sanguinicollis* n. var.

Black with a cyanic green luster; prothorax and the ventral segments of abdomen reddish.

Length: 12-14 mm. Width: 3-4 mm.

Hab.—Loo-Choo; Ishigakijima 2 ♂ V, 1911 (S. MATSUMURA). Formosa; Urai 1 ♂ 8-VI, 1926 (M. KATÔ), Horisha 2 ♀ 24-V, 1925 (S. TAKANO), 1 ♂ VII, 1918 (S. HIRAYAMA), Kôshun 1 ♂ 10-V, 1918 (J. SONAN), Kuraru 1 ♀ 9-V, 1927 (M. KATÔ).

Distr.—Loo-Choo, Formosa.

var. 4. *candezellus* n. nom.*Agonischius obscuripes* var. b. CANDÈZE, Monogr., Vol. IV, p. 421 (1863).

Length: 12-15 mm. Width: 3-3½ mm.

Hab.—Formosa; Horisha 2 ♂, 1 ♀ 15-VI, 1925 (S. TAKANO), Tainan 1 ♀ 2-VI, 1925 (S. TAKANO).

Distr.—Formosa, Indochina.

var. 5. *brunneus* n. var.

Body wholly brown or brownish yellow.

Length: 11½-14½ mm. Width: 2½-3½ mm.

Hab.—Formosa: Horisha 2 ♂, 1 ♀ 15-VI, 1925 (S. TAKANO), 1 ♂ 23-VII, 1926 (E. KINOSHITA), Baibara 1 ♂ 20-VII, 1925 (T. UCHIDA),

Distr.—Formosa.

var. 6. *marginicollis* n. var.

Body brownish yellow; at the middle of pronotum longitudinally black.

Length: 11½ mm. Width: 2½ mm.

Hab.—Formosa; Baibara 1 ♂ 15–VII. 1926 (the author).

Distr.—Formosa.

var. 7. *taikozana* n. var.

Body much smaller, relatively slenderer, at the head fuscous.

Length: $8\frac{1}{2}$ mm. Width: 2 mm.

Hab.—Formosa; Mt. Taikô 1 ♂ 1–V, 1923 (M. Katô).

Distr.—Formosa.

30. *Dolopius candezei* LEWIS

Agriotes ferrugineipennis MOTSCHULSKY, Bull. Moscou, XXXIX, p. 166 (1866).

Agriotes candezei LEWIS, Cat. Coll. Japanese Archipel., p. 16 (1879).

Hab.—Hokkaido; Sapporo (S. MATSUMURA). Honshiu; Towada (S. MINOWA and the author), Nikkô (S. MATSUMURA), Chûzenji (E. GALLOIS).

Distr.—Japan proper.

Nom. Jap.: *Hime-nakaguro-kaba-kometsuki*

31. *Ochosternus zealandicus* WHITE

Limonium zealandicus WHITE, Voy. Erebus and Terror, Ins., p. 7 (1846).

Ochosternus zealandicus CANDÈZE, Monogr., IV, p. 446, t. 5, f. 11 (1863).

Hab.—Formosa; Kôtôsho V, (T. SHIRAKI).

Distr.—Newzealand, Formosa.

Nom. Jap.: *Kuro-kushihige-kometsuki*

32. *Thoramus wakefieldi* SHARP

Thoramus wakefieldi SHARP, Ann. Mag. Nat. Hist., (4) XIX, p. 399 (1877).

Hab.—Formosa; Kôtôsho V (T. SHIRAKI).

Distr.—Newzealand, Formosa.

Nom. Jap.: *Taiwan-kuro-naga-kometsuki*

33. *Glyphonyx rubricollis* n. sp. (Pl. I, fig. 16).

♂, ♀. Black, shining, with fine, short, tawny pubescence. Head evenly and closely punctured, the frontal carina being well elevated. Prothorax convex, bright reddish, rounded anteriorly, on the lateral sides slightly incurved in the middle, very gently and gradually widening before the hind angles, with a feeble, longitudinal channel in the middle, very densely punctured on the whole surface; punctuation rather finer and a little sparser on the disc than on the lateral sides; the hind angles acute; scutellum elongated and pointed posteriorly. Elytra distinctly striated with strong punctuation, the interstices flat, minutely and feebly punctured. Antennae brown, the 3rd joint small, the 2nd slightly longer,

loosely serrated from the 4th. Legs dark brown, the 4th tarsal joints distinctly lamellated.

Length: $8\frac{1}{2}$ mm. Width: $2\frac{1}{3}$ mm.

Hab.—Formosa: Arisan 1 ♀ 2-V, 1907 (S. MATSUMURA), Horisha 1 ♂ 30-IV, 1907 (S. MATSUMURA), Kagi 1 ♂ 26-IV, 1907 (S. MATSUMURA), Kôshun 1 ♂, 1 ♀ 9-VII, 1906 (S. MATSUMURA), Ranrun 1 ♀ 8-VII, 1925 (S. Isshiki), Tompo 1 ♂ 14-VII, 1925 (the author), Baibara 2 ♂ 12-VII, 1926 (the author), Takesaki 1 ♀ 11-V, 1923 (M. KATÔ).

Distr.—Formosa.

Nom. Jap.: *Seaka-kuchiboso-kometsuki*

34. *Silesis okinawensis* n. sp. (Pl. I. fig. 17)

♂, ♀. Bright chestnut brown, shining, clothed with golden grey hairs. Head black, closely punctured. Prothorax convex, fuscous on the disc of pronotum, rounded anteriorly, on the lateral sides parallel, widening a little before the hind angles; punctation like that of the head; the hind angles acute, with each a long carina which is prolonged anteriorly to near the three fourths of the lateral length; scutellum oblong, somewhat elevated longitudinally in the middle. Elytra with punctured striae, the interstices nearly flat, minutely and feebly punctured. Antennae somewhat paler, the 2nd joint small, nearly as long as the 3rd, feebly serrated from the 4th. Legs slender, the lamellae of the tarsal joints vary distinct.

Length: $7\frac{1}{2}$ – $9\frac{1}{3}$ mm. Width: $2\frac{1}{4}$ – $2\frac{1}{2}$ mm.

Hab.—Loo-choo: Okinawahontô 2 ♂, 3 ♀ (S. SAKAGUCHI). 1 ♂, 1 ♀ 30-V, 1904 (H. KUROIWA), Ishigakijima 1 ♂ V, 1911 (S. MATSUMURA).

Distr.—Loo-Choo.

Nom. Jap.: *Okinawa-kuchibuto-kometsuki*

35. *Denticollis dilutiangulus* MOTSCHULSKY

Campylus dilutiangulus MOTSCHULSKY, SCHRENK's Reisen Amurl., II, P. 112, t. 7, f. 26, (1860).

Hab.—Saghalien; Toyohara 2 ♂ 29-VII, 1914 (S. ISSHIKI and J. ADACHI), Konuma 2 ♂ 8-VII, 1927 (the author), Kiminai 1 ♂, 2 ♀ 12-VII, 1927 (S. MINOWA and the author). Kuriles; Iriribushi in Etrup Island 1 ♂, 17-VII, 1927 (K. DOI).

Distr.—Dauria, Saghalien, Kuriles.

Nom. Jap.: *Hime-hotaru-kometsuki*

36. *Plectrosternus rufus* LACORDAIRE

Plectrosternum rufus (LATR. nom. nud.) LACORDAIRE, Gen. Col. IV, X. 228 (1857).

Plectrosternum rufus CANDÈZE, Monogr., IV, p. 493, t. 5, f. 6 (1863).

Hab.—Fromosa; Kuraru 1 ♂ 6-VII, 1926 (the author).

Distr.—Sylhet, Assam, Cochinchina, Formosa.

Nom. Jap.: *Tsuyahada-oni-kometsuki*

摘 要

本邦産叩頭蟲の屬する六亞科を研究して、廿五屬、六拾四種、七變種を得た。其の内二新屬、拾七新種及五新變種の記載と共に、本邦領土未記録の十七種及二變種を枚舉して置いた。加へて所屬を變更した一種ヒメナカグロカバコメツキ(*Dolopius candezei* LEW.)をも掲げた。上記素木得一博士採集のものは、總べて臺灣總督府中央研究所所蔵のものである。

NEW AND HITHERTO UNRECODED SPECIES OF *DERMESTIDÆ* FROM JAPAN

By

S. MATSUMURA & K. YOKOYAMA

1. *Dermestes lardarius* LINNÉ

A single female which does not differ practically from the European *D. lardarius* was captured by S. ISSHIKI at Sapporo, Hokkaido, July in 1919, and is now in the Entom. Mus. Hokk. Imp. Univ. It seems to be very rare.

2. *Dermestes vorax* var. *albofasciata* n. var.

In form, structure and punctuation, etc., it is quite similar with the typical *D. vorax*, but differs from it in possessing a smaller size and a whitish transverse zone which is reddish in the typical species.

Length of body 6.5 mm.

One female was captured by K. YOKOYAMA at Suigen, Corea, April in 1927, and is now in his cabinet.

3. *Megatoma varius* n. sp.

Body brownish black. Head black, closely punctured. Antennae yellowish, 11 jointed, basal joint large and rounded, 2nd somewhat elongated, much narrower than the 1st; 3rd, 4th and 5th subequal, very small and rounded,

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